Matt Blunt, Governor . Dovle Childers, Director

## STATE OF MISSOURI

## DEPARTMENT OF NATURAL RESOURCES

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NOV 0 7 2005

Mr. John DeLashmit, P.E. U.S. Environmental Protection Agency Region VII 901 North Fifth Street Kansas City, KS 66101

RE: Permit for Owensville Wastewater Treatment Plant in Lieu of Total Maximum Daily Load for Red Oak Creek (WBID 2038) and Tributary (WBIDs 3361 and 3360)

Dear Mr. DeLashmit:

Red Oak Creek (2 miles) and Tributary (one mile) near Owensville in Gasconade County, Missouri, are on the 2002 303(d) list for Volatile Suspended Solids (VSS). The source of this impairment is listed as the Owensville Wastewater Treatment Plant (WWTP), Permit Number MO-0041068, which discharges into a tributary to Red Oak Creek (WBID 3361). The Missouri Department of Natural Resources has opted to correct this impairment through permit limits in lieu of a Total Maximum Daily Load (TMDL).

The outfall is to the tributary to Red Oak Creek, WBID 3361. The impaired waterbody segments are all in a rural, undeveloped area. There are no WWTPs upstream of the Owensville WWTP that would contribute to the tributary to Red Oak and Red Oak Creek. The listing for the impaired reaches was based on two water quality surveys in September 1995 and July 1997 that identified significant suspended algae below the lagoon outfall. Thirty-six (36) samples were collected in August of 2001 and June of 2002 showing impaired Dissolved Oxygen (DO) levels in the stream. These impacts are judged to be severe enough in three miles of stream to exceed Missouri's water quality standards for DO and the general criteria for objectionable floating material, color and conditions harmful to aquatic life.

The city's permit, with interim and final limits, was reissued on September 30, 2005. The VSS standard (as a narrative of no noticeable downstream objectionable deposits) will be achieved by limiting the effluent to 15 mg/L Total Suspended Solids (TSS) as a monthly average and 20 mg/L as a weekly average. Other final effluent limitations include Biochemical Oxygen Demand (BOD) at 10 mg/L/15 mg/L (monthly average/daily maximum) and Ammonia at 1.7 mg/L/3.4 mg/L (summer) and 2.0 mg/L/4.0 mg/L (winter). These limits were calculated from wasteload allocations established by the QUAL2E model and the facility will undergo an upgrade to meet them. They will go into effect three years from the date the permit was reissued and should insure that the stream's water quality standards will be met. The interim limits of 45 mg/L BOD (monthly average) and 70 mg/L TSS (monthly average) will remain in effect during construction, until September 30, 2008.



Enclosed please find the draft Missouri State Operating Permit for the Owensville WWTP. As just stated, the final limits will go into effect September 30, 2008. By meeting these limits, the water quality standards should be achieved in Red Oak Creek and its tributary. At the end of the three-year period, Whole Effluent Toxicity Tests (to be submitted annually) will be required and Oil and Grease limits will go into effect. In addition, instream monitoring will be required (after the interim period) for DO, Temperature, pH, and Ammonia. To determine if the new permit limits have eliminated the impairment, the department will schedule ambient stream monitoring in 2009, within one year of the completion of construction for the new wastewater facility. The permit also includes a reopener clause to allow for stricter limits if monitoring shows water quality standard violations.

With this letter, the department submits the Owensville WWTP permit to the U.S. EPA for concurrence that the permit will serve in lieu of a TMDL for three waterbody segments: Red Oak Creek (WBID 2038) and its tributary (WBIDs 3360 and 3361). We appreciate EPA taking prompt action on this matter. If you have any questions, please contact Mr. Philip Schroeder at (573) 751-6825 or by mail at Missouri Department of Natural Resources, Water Protection Program, P.O. Box 176, Jefferson City, Missouri 65102-0176.

Sincerely,
WATER PROTECTION PROGRAM
Edward Calbraith
Director

EG:psl

Enclosure

c: Mr. Daniel R. Schuette, Director, DEQ Mr. Earl Pabst, Deputy Director, DEQ Missouri Clean Water Commission



## UNITED STATES ENVIRONMENTAL PROTECTION AGENCY

## REGION VII 901 NORTH 5TH STREET KANSAS CITY, KANSAS 66101

APR 2 1 2006

Mr. Edward Galbraith, Director Water Pollution Control Program Water Protection and Soil Conservation Division Missouri Department of Natural Resources P.O. Box 176 Jefferson City, Missouri 65102

Dear Mr. Galbraith:

RE: Permit Limits in Lieu of a Total Maximum Daily Load for Red Oak Creek, Red Oak Creek Tributary, and Horseshoe Creek

This letter responds to the submissions from the Missouri Department of Natural Resources (MDNR), dated November 17, 2005, and February 27, 2006, regarding Red Oak Creek, Red Oak Creek Tributary, and Horseshoe Creek. These waterbodies were listed as impaired on Missouri's 2002 §303(d) list. MDNR proposes to correct the impairment with National Pollutant Discharge Elimination System (NPDES) permit limits in lieu of a Total Maximum Daily Load (TMDL). The following water body segments were proposed to be corrected through permit limits.

					Year
Water					added
Body	WBID	Impairment	Source	Permit #	to list
Red Oak	2038	Volatile	Owensville Wastewater	MO-0041068	2002
Creek		Suspended	Treatment Plant		
		Solids (VSS)	(WWTP)		
Red Oak	3360	Volatile	Owensville Wastewater	MO-0041068	2002
Creek		Suspended	Treatment Plant		
Tributary		Solids (VSS)	(WWTP)		
Red Oak	3361	Volatile	Owensville Wastewater	MO-0041068	2002
Creek		Suspended	Treatment Plant		
Tributary		Solids (VSS)	(WWTP)		
Horseshoe	3413	Biochemical	Oak Grove Northwest	MO-0106259	2002
Creek		Oxygen	Wastewater Treatment		
		Demand	Plant (WWTP)		
		(BOD) and			
		Ammonia			





Waters require TMDLs when certain pollution control requirements are not stringent enough to implement water quality standards for such waters. To exempt an impaired water from the TMDL process, the pollution control requirements cited in the regulation under 130.7(b)(i), (ii), and (iii) must be established and enforced by federal, state, or local laws or regulations, and be stringent enough that, when applied, the receiving water will meet water quality standards.

The Owensville WWTP has been identified as the sole source of the VSS impairment, on Red Oak Creek and Red Oak Creek Tributary, as a result of surface water monitoring directly above and below the WWTP. The NPDES permit issued on September 30, 2005, for the Owensville WWTP includes a compliance schedule; final limits will achieve water quality standards for VSS by September 30, 2008.

The Oak Grove WWTP has been identified as the sole source of the Biochemical Oxygen Demand and ammonia impairment, on Horseshoe Creek, as a result of surface water monitoring directly above and below the WWTP. The NPDES permit was issued on February 10, 2006. The Horseshoe Creek discharges have been eliminated and the facility now discharges to a tributary of Sni-a-Bar Creek.

The Environmental Protection Agency (EPA) has completed its review of these submissions, and other previously submitted information. The permit actions appear sufficient to address the impairments per 40 CFR 130.7(b)(ii).

On February 27, 2001, EPA entered into a Consent Decree with the American Canoe Association, which outlined milestones for developing TMDL documents for waterbodies included on the 1998 §303(d) list. In fulfilling the milestone obligations, Paragraph 5.B(4)(b) of the Consent Decree indicates that waterbodies that EPA determines do not need TMDLs consistent or are subsequently removed from the Missouri §303(d) list also count toward meeting the TMDL Consent Decree requirements.

Red Oak Creek, Red Oak Creek Tributary, and Horseshoe Creek, were listed on the 2002 §303(d) list but were not listed on the 1998 §303(d) list. Therefore, the permit action on these three waterbodies will not count toward meeting the TMDL Consent Decree requirements. During the next Missouri 303(d) listing process, EPA will consider all the submitted information and supporting documentation as well as any new data gathered during the intervening time as supporting evidence justifying removal of the waterbodies from the list.

If you have any questions or concerns in regards to this matter, please contact Jack Generaux, TMDL Team Leader, at (913)551-7690, or Tabatha Adkins, TMDL Team, at (913)551-7128.

Sincerely,

Betty Berry Acting Director

Water, Wetlands, and Pesticides Division

cc: Ann Crawford, TMDL Chief, MO Dept of Natural Resources, Jefferson City, MO Phil Schroeder, Missouri Department of Natural Resources, Jefferson City, MO